CW#8a: Midpoint Application Day 2

Geometry

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_

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| **CRS** | GRE504 – Find the midpoint of a line segment |
| **Objectives** | **Application Objective:**  1.6A Find the midpoint of a segment in the coordinate plane using the midpoint formula  1.6B Find the endpoint of a segment given an endpoint and midpoint |

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|  | | * Read the problem. * What is the goal of the problem? * Paraphrase the goal | | | | |
|  | | * Underline/circle anything that you feel is important. * Paraphrase the givens. | | | | |
|  | | * Brainstorm strategies to reach the goal. * Draw a picture or chart if needed. | | | | |
|  | | * Decide on your method, formula, equation, or graph. * SOLVE! | | | | |
|  | | * Check yo’self! * Did you answer the question? Does it make sense? ARE YOU SURE?!?!?! * Write your answer in a complete sentence | | | | |
| 1) ABCD is an isosceles trapezoid. This means that BD is parallel o AC, and AB is congruent to CD. Line segment EF is the median of trapezoid ABCD, which means it bisects AB and CD. Find the coordinates of E and F. | | | | | |
| **G** | **R** | | **A** | **S** | **P** |
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| 2) A median of a triangle is a line segment from one vertex to the midpoint of the opposite side. For example, A is a vertex and AE is the line segment that bisects BC. Find the coordinate of each midpoint created by each median (D, E, and F). | **G:** |  |
| **R:** |  |
| **A:** |  |
| **S:** |  |
| **P:** |  |

3. With the given endpoints (2,5) and (4,9) and the midpoint being on a perpendicular bisector, what is the equation of the line that goes through the original two points, and what is the equation of the perpendicular line that goes through the midpoint?

**G:**

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**4.** Find the point that is one-fourth of the way from (2, 4) to (10, 8).

**G:**

**R:  
  
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